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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/405,436

09/23/99

MIELONEN

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1912

007812

PM82/1208

SMITH-HILL AND BEDELL
12670 N W BARNES ROAD
SUITE 104
PORTLAND OR 97229

EXAMINER

GALL, L

ART UNIT

PAPER NUMBER

3627

DATE MAILED:

12/08/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/405,436

Applicant(s)

Mielonen

Examiner

Lloyd Gall

Group Art Unit

3627

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

P r i d for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 10/3/00
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-27 is/are pending in the application.
- Of the above claim(s) 12-27 is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-11 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Pri rity under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachm nt(s)

- ☒ Information Disclosure Stat ment(s), PTO-1449, Pap r No(s). 5,67 ☐ Int rvi w Summary, PTO-413
- ☒ Notice of Ref rrences Cit d, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsp rson's Patent Drawing Review, PTO-948 ☐ Other _____

Office Acti n Summary

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DETAILED ACTION

Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-11, drawn to a cylinder lock and key combination, classified in class 70, subclass 366.
 - II. Claims 12-19, drawn to a key blank, classified in class 70, subclass 406.
 - III. Claims 20-27, drawn to a key, classified in class 70, subclass 409.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions Group I and either Group II or Group III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination, for example, the specifics of claims 14-17. The subcombination has separate utility such as with pin tumblers, or with a tumbler disc having only one discrete counter surface.
3. Inventions Group II and Group III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention Group II has separate utility such as for cutting a key to provide recesses to actuate pin tumblers. See MPEP § 806.05(d).

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4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Mr. Smith-Hill on August 11, 2000 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-11. Affirmation of this election must be made by applicant in replying to this Office action. Claims 12-27 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

7. The disclosure is objected to because of the following informalities: On page 4, line 13, the period at the end of the line appears to be inappropriate. On page 17, line 20, the step should be labeled. On page 18, line 2, it appears that "3" should be replaced with --11c--. The Abstract is improperly greater than 250 words in length.

Appropriate correction is required.

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any

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person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not clear what “angular pitch” is being referred to.

10. Claim 6 is objected to because of the following informalities: In claim 6, line 1, --to-- should follow “according”. Appropriate correction is required.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 5-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5, line 3, it is not clear what is meant by “at least substantially identical”.

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Martikainen.

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Martikainen teaches all of the claimed lock cylinder and key elements, including a lock body 1, cylinder 2, locking discs 7, a 0-locking disc 5, a locking bar 4 receivable in peripheral notches of the discs. As seen in figs. 23-29, the locking discs may include a key opening having counter surfaces 64, which are engaged by a combination surface 61, 62 of the key. The combination surface portions 62 may have multiple combination values, for engaging the surfaces 64 and rotating the discs to release the locking bar 4. Further, although the key of Martikainen teaches plural combination values 62, the last paragraph of claim 1 claims only a key which is capable of being provided selectively with at least two values. With respect to claims 5 and 6, the openings of the discs are regarded as at least substantially identical, and about 15 degrees.

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 2-4 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martikainen in view of Fitz Gerald.

As seen in fig. 2, Fitz Gerald teaches plural discrete counter surfaces 21, 22, 23, wherein surface 23 extends substantially to a central normal with respect to claim 4, and a return surface at the lead line for numeral 19 in fig. 2 which is contacted by the bottom of the right side of the key as seen in fig. 2 to return the discs to their initial locking positions. With respect to claim 9, the return surface is aligned with a counter surface 21. With respect to claim 10, the lock and key of

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Martikainen are operable in two turning directions. To modify the discrete counter surfaces 64 of Martikainen in figs. 23-29, such that they include plural discrete surfaces for each direction of rotation of the discs and key, as well as a return surface for returning the discs to their initial positions, would have been obvious in view of the teaching of Fitz Gerald, to allow multiple key combinations to open the lock. With respect to claim 8, to modify the lock of Martikainen such that it is turnable in only one direction, would also have been obvious in view of the teaching of Fitz Gerald, as a matter of one's preference.

17. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Martikainen reference as applied to claim 10 above, and further in view of the Finland reference (618).

As seen in fig. 10, the Finland reference teaches at least eight discrete surfaces 11-20 in pairs, for being contacted by a key. To modify the discrete counter surfaces of the modified Martikainen reference to include at least eight surfaces arranged in pairs, would have been obvious in view of the teaching of the Finland reference, to optimize the usability of the discs with keys of different combination values.

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lloyd Gall whose telephone number is (703) 308-0828. The examiner can normally be reached on Monday-Friday from 8:00 am to 5:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Anne Dayoan, can be reached at (703) 308-3865.

Submission of your response by facsimile transmission is encouraged. Group 3620's facsimile number is **(703) 305-3597**. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence **not** permitted by facsimile transmission, see MPEP § 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check **should not be** submitted by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP § 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 305-3597) on _____ (Date)

(Typed or printed name of person signing this certificate)

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(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP § 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be directed to steven.meyers@uspto.gov.

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed expressed waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature relating to the status of this application should be directed to the group receptionist at (703) 308-2168.

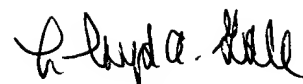
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LG

December 6, 2000

A handwritten signature in black ink, appearing to read "Lloyd A. Gall". The signature is fluid and cursive, with the first name "Lloyd" and last name "Gall" clearly distinguishable.

Lloyd A. Gall
Primary Examiner